

0054365

H1062

Recra LabNet - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD B99-093 H1062

DATE RECEIVED: 09/29/00

RFW LOT # :0009L815

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B10F04						
% MOISTURE	001	SO	00L*S158	09/27/00	10/05/00	10/06/00
% MOISTURE	001 REP	SO	00L*S158	09/27/00	10/05/00	10/06/00
% SOLIDS	001	SO	00L*S158	09/27/00	10/05/00	10/06/00
% SOLIDS	001 REP	SO	00L*S158	09/27/00	10/05/00	10/06/00
B10F05						
% MOISTURE	002	SO	00L*S158	09/27/00	10/05/00	10/06/00
% SOLIDS	002	SO	00L*S158	09/27/00	10/05/00	10/06/00
B10F06						
% MOISTURE	003	SO	00L*S158	09/27/00	10/05/00	10/06/00
% SOLIDS	003	SO	00L*S158	09/27/00	10/05/00	10/06/00
B10DY9						
% MOISTURE	004	SO	00L*S158	09/27/00	10/05/00	10/06/00
% SOLIDS	004	SO	00L*S158	09/27/00	10/05/00	10/06/00
B10F00						
% MOISTURE	005	SO	00L*S158	09/27/00	10/05/00	10/06/00
% SOLIDS	005	SO	00L*S158	09/27/00	10/05/00	10/06/00
B10F01						
% MOISTURE	006	SO	00L*S158	09/27/00	10/05/00	10/06/00
% SOLIDS	006	SO	00L*S158	09/27/00	10/05/00	10/06/00
B10F02						
% MOISTURE	007	SO	00L*S158	09/27/00	10/05/00	10/06/00
% SOLIDS	007	SO	00L*S158	09/27/00	10/05/00	10/06/00
B10F03						
% MOISTURE	008	SO	00L*S158	09/27/00	10/05/00	10/06/00

RECEIVED
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Recra LabNet - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD B99-093 H1062

DATE RECEIVED: 09/29/00

RFW LOT # :0009L815

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
% SOLIDS	008	SO	00L%S158	09/27/00	10/05/00	10/06/00

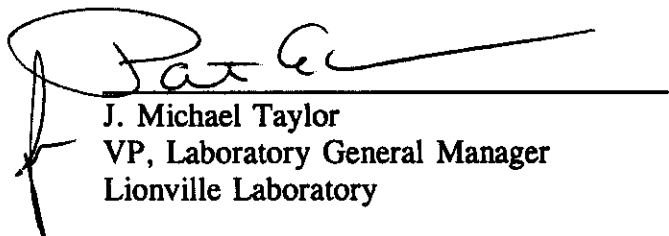
**Recra LabNet Philadelphia
Analytical Report**

Client : TNU-HANFORD B99-093 H1062
RFW# : 0009L815

W.O. # : 10985-001-001-9999-00
Date Received: 09-29-00

INORGANIC CASE NARRATIVE

1. This narrative covers the analyses of 8 solid samples.
2. The samples were prepared and analyzed in accordance with the methods checked on the attached glossary.
3. Sample holding times as required by the method and/or contract were met.
4. The cooler temperature was recorded on the chain-of-custody.
5. The replicate analyses were within the 20% Relative Percent Difference (RPD) control limit.
6. I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.



J. Michael Taylor
VP, Laboratory General Manager
Lionville Laboratory

njp\109-815

11-17-00
Date

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 10 pages.

WET CHEMISTRY
METHODS GLOSSARY FOR SOIL/SOLIDS SAMPLE ANALYSIS

	<u>ASTM</u>	<u>SW846</u>	<u>OTHER</u>
% Ash	___ D2216-80		
% Moisture	___ <input checked="" type="checkbox"/> D2216-80		___ ILMO4.0 (e)
% Solids	___ <input checked="" type="checkbox"/> D2216-80		___ ILMO4.0 (e)
% Volatile Solids	___ D2216-80		
ASTM Extraction in Water	___ D3987-81/85		
BTU	___ D240-87		
CEC		___ 9081	___ c
Chromium VI		___ 3060A/7196A	
Corrosivity ___ by coupon ___ by pH		___ 1110(mod) ___ 9045C	
Cyanide, Total		___ 9010B	___ ILMO4.0 (e)
Cyanide, Reactive		___ Section 7.3	
Halides, Extractable Organic		___ 9020B	___ EPA 600/4/84-008
Halides, Total		___ 9020B	___ EPA 600/4/84-008
EP Toxicity		___ 1310A	
Flash Point		___ 1010	
Ignitability		___ 1010	
Oil & Grease		___ 9071A	
Carbon, Total Organic		___ 9060	___ Lloyd Kahn (mod)
Oxygen Bomb Prep for Anions	___ D240-87(mod)	___ 5050	
Petroleum Hydrocarbons, Total Recoverable		___ 9071	___ EPA 418.1
pH, Soil		___ 9045C	
Sulfide, Reactive		___ Section 7.3	
Sulfide		___ 9030B(mod)	
Specific Gravity	___ D1429-76C/	___ D5057-90	
Sulfur, Total		___ 9056	
Synthetic Preparation Leach		___ 1312	
Paint Filter		___ 9095A	
Other:	Method:		
Other:	Method		

Recra LabNet Philadelphia
METHOD REFERENCES AND DATA QUALIFIERS

DATA QUALIFIERS

U = Indicates that the parameter was not detected at or above the reported limit. The associated numerical value is the sample detection limit.

* = Indicates that the original sample result is greater than 4x the spike amount added.

ABBREVIATIONS

MB = Method or Preparation Blank.

MS = Matrix Spike.

MSD = Matrix Spike Duplicate.

REP = Sample Replicate

LC = Laboratory Control Sample.

NC = Not calculated.

A suffix of -R, -S, or -T following these codes indicate a replicate, spike or sample duplicate analysis respectively.

ANALYTICAL WET CHEMISTRY METHODS

1. ASTM Standard Methods.
2. USEPA Methods for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020).
3. Test Methods for Evaluating Solid Waste (USEPA SW-846).
 - a. Standard Methods for the Examination of Water and Waste, 16 ed, (1983).
 - b. Standard Methods for the Examination of Water and Waste, 17 ed, (1989)/18ed (1992).
 - c. Method of Soil Analysis, Part 1, Physical and Mineralogical Methods, 2nd ed, (1986).
 - d. Method of Soil Analysis, Part 2, Chemical and Microbiological Properties, Am. Soc. Agron., Madison, WI (1965).
 - e. USEPA Contract Laboratory Program, Statement of Work for Inorganic Analysis.
 - f. Code of Federal Regulations.

L-WI-034/D-6/99

Recra LabNet - Lionville

INORGANICS DATA SUMMARY REPORT 11/17/00

CLIENT: TNUHANFORD B99-093 H1062
WORK ORDER: 10985-001-001-9999-00

RECRA LOT #: 0009L815

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
*****	*****	*****	*****	*****	*****	*****
-001	B10F04	% Moisture	11.3	%	0.01	1.0
		% Solids	88.7	%	0.01	1.0
-002	B10F05	% Moisture	23.8	%	0.01	1.0
		% Solids	76.2	%	0.01	1.0
-003	B10F06	% Moisture	39.6	%	0.01	1.0
		% Solids	60.4	%	0.01	1.0
-004	B10DY9	% Moisture	2.1	%	0.01	1.0
		% Solids	97.9	%	0.01	1.0
-005	B10F00	% Moisture	20.1	%	0.01	1.0
		% Solids	79.9	%	0.01	1.0
-006	B10F01	% Moisture	11.2	%	0.01	1.0
		% Solids	88.8	%	0.01	1.0
-007	B10F02	% Moisture	10.9	%	0.01	1.0
		% Solids	89.1	%	0.01	1.0
-008	B10F03	% Moisture	0.51	%	0.01	1.0
		% Solids	99.5	%	0.01	1.0

Recra LabNet - Lionville

INORGANICS PRECISION REPORT 11/17/00

CLIENT: TNUHANFORD B99-093 H1062
WORK ORDER: 10985-001-001-9999-00

RECRA LOT #: 0009L815

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR (REP)
-----	-----	-----	-----	-----	-----	-----
-001REP	B10F04	% Moisture	11.3	11.8	3.8	1.0
		% Solids	88.7	88.2	0.50	1.0

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Client <u>TNU-Hanford B99-093</u>						Refrigerator # <u>1</u>													
Est. Final Proj. Sampling Date _____						#/Type Container		Liquid											
Project # <u>10985-001-001-999900</u>								Solid	<u>1P_G</u>										
Project Contact/Phone # _____						Volume		Liquid											
RECRA Project Manager <u>al</u>								Solid	<u>250</u>										
QC Spec Del Std TAT <u>30 day</u>						Preservatives		-											
Date Rec'd <u>9-29-00</u> Date Due <u>10-29-00</u>						ANALYSES REQUESTED →				ORGANIC				INORG					
Account # _____										VOA	BNA	Pes/ PCB	Herb	Metal	N	C			
MATRIX CODES:			Lab ID	Client ID/Description	Matrix QC Chosen (✓)		Matrix	Date Collected	Time Collected	RECRA LabNet Use Only									
S - Soil	SE - Sediment	SO - Solid			MS	MSD				α24X					I ² mST				
SL - Sludge	W - Water	O - Oil	001	B10F04			So	9-27-00	1236	✓					✓				
A - Air	D8 - Drum Solids		002	1 5					1245	✓					✓				
DL - Drum Liquide	L - EP/TCLP Leachate		003	1 6					1256	✓					✓				
WI - Wipe	X - Other		004	B10DY9					1111	✓					✓				
F - Fish			005	B10F00					1135	✓					✓				
			006	1 1					1155	✓					✓				
			007	1 2					1210	✓					✓				
			008	1 3					1225	✓					✓				

Special Instructions: Saf 899-093

Carbon tetrachloride only

DATE/REVISIONS:

1. Pen Matrix QC

2

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1

5

6

Relinquished by	Received by	Date	Time
Lee Ex	D. J. Smith	9/29/00	0930

Relinquished by	Received by	Date	Time
COMPOSITE WASTE		ORIGINAL	
		REWRITTEN	

Discrepancies Between
Samples Labels and
COC Record? Y or N

NOTES:

4235 7953 9415

RECRA LabNet Use Only

Samples were: ✓

1) Shipped ☐ or
Hand Delivered ☐

Airbill # _____

2) Ambient or Cooled

3) Received in Good
Condition ☒ or N

4) Labels Indicate
Properly Preserved
☒ or N

5) Received Within
Holding Times
☒ or N

COC Tape was:

1) Present on Outer
Package ☒ or N

2) Unbroken on Outer
Package ☒ or N

3) Present on Sample
☒ or N

4) Unbroken on
Sample ☒ or N

COC Record Present
Upon Sample Rec't
☒ or N

Cooler
Temp. 46 °C

9415

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B99-093-17		Page 2 of 2	
Collector TMJOHANSEN/GSTHOMAS		Company Contact VJROHAY		Telephone No. 372-9100		Project Coordinator TRENT, SJ		Price Code 9N Data Turnaround 45 Days	
Project Designation 200-ZP-2 Passive Soil Vapor Extraction - Other Solid		Sampling Location 200W		SAF No. B99-093		Air Quality <input type="checkbox"/>			
Ice Chest No. ERC 99-052 (10F1)		Field Logbook No. EL-1516		COA R20ZP2DP60		Method of Shipment FED EX			
Shipped To TMA/RECRA		Offsite Property No. A000344		Bill of Lading/Air Bill No. 42357953-9415					
POSSIBLE SAMPLE HAZARDS/REMARKS Special Handling and/or Storage Sample originated in non radiological zone <2000pci/g		Preservation		Cool 4C					
		Type of Container		uG					
		No. of Container(s)		1					
		Volume		250mL					
SAMPLE ANALYSIS				VOA - 8260A (TCL) (Carbon tetrachloride)					
Sample No.		Matrix *		Sample Date		Sample Time			
B10F04		OTHER SOLID		9-27-00		1236		X	
B10F05		OTHER SOLID		9-27-00		1245		X	
B10F06		OTHER SOLID		9-27-00		1256		X	
CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS				Matrix * S=Soil SE=Soil/Sediment SO=Solid S=Sludge W=Water O=Oil A=Air DS=Dry Solids DL=Dry Liquids T=Time W=Wipe L=Liquid V=Vegetation X=Other	
Relinquished By <i>[Signature]</i>		Date/Time 9-27-00		Received By <i>[Signature]</i>		Date/Time 9-27-00			
Relinquished By <i>[Signature]</i>		Date/Time 9-28-00		Received By <i>[Signature]</i>		Date/Time 9-28-00			
Relinquished By <i>[Signature]</i>		Date/Time 9-28-00		Received By <i>[Signature]</i>		Date/Time 9-28-00			
Relinquished By <i>[Signature]</i>		Date/Time 9-29-00/0930		Received By <i>[Signature]</i>		Date/Time 9-29-00/0930			
LABORATORY SECTION Received By _____ Title _____ Date/Time _____				SPECIAL INSTRUCTIONS ** Laboratory may use medium level preparation for VOA. They are to report any other halogenated compounds found. ** Laboratory must include the % Moisture data as part of all hard copy reports. Samples stored in Ref.# 28 at the 3728 Shipping Facility on 9/28/00 Collector not available to relinquish samples on 9/28/00 for shipment. RT 9/28/00					
FINAL SAMPLE DISPOSITION				Disposed By _____ Date/Time _____					

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						B99-093-17		Page 1 of 2			
Collector TMJOHANSEN/GSTHOMAS		Company Contact VJROHAY		Telephone No. 372-9100		Project Coordinator TRENT, SJ		Price Code 9N		Data Turnaround 45 Days			
Project Designation 200-ZP-2 Passive Soil Vapor Extraction - Other Solid		Sampling Location 200W		SAF No. B99-093		Air Quality <input type="checkbox"/>							
Ice Chest No. EAC 99-052 (102)		Field Logbook No. EL-1516		COA R20ZP2DP60		Method of Shipment FED EX							
Shipped To TMA/RECRA MMS 9-27-00		Offsite Property No. A000344		Bill of Lading/Air Bill No. 42357953-9415									
Special Handling and/or Storage Sample originated in non radiological zone <2000pci/g		Preservation		Cool 4C									
		Type of Container		nG									
		No. of Container(s)		1									
		Volume		250mL									
SAMPLE ANALYSIS				VOA - 8260A (TCL) (Carbon tetrachloride)									
Sample No.	Matrix *	Sample Date	Sample Time										
B10DY9	OTHER SOLID	9-27-00	1111	X									
B10F00	OTHER SOLID	9-27-00	1135	V									
B10F01	OTHER SOLID	9-27-00	1155	X									
B10F02	OTHER SOLID	9-27-00	1210	X									
B10F03	OTHER SOLID	9-27-00	1225	X									
CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS				Matrix *					
Relinquished By <i>[Signature]</i>		Date/Time 9-27-00		Received By <i>[Signature]</i>		Date/Time 9-27-00		** Laboratory may use medium level preparation for VOA. They are to report any other halogenated compounds found. ** Laboratory must include the % Moisture data as part of all hard copy reports. Samples stored in Ref.# 2B at the 3728 Shipping Facility on 9/22/00 Collector not available to relinquish samples on 9/28/00 for shipment. JRT 9/28/00				S=Soil SE=Settlement SO=Solids S=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other	
Relinquished By <i>[Signature]</i>		Date/Time 9/28/00		Received By <i>[Signature]</i>		Date/Time 9/28/00							
Relinquished By <i>[Signature]</i>		Date/Time 9/28/00		Received By <i>[Signature]</i>		Date/Time 9/28/00							
Relinquished By <i>[Signature]</i>		Date/Time 9/29/00		Received By <i>[Signature]</i>		Date/Time 9/29/00							
Relinquished By <i>[Signature]</i>		Date/Time 9/29/00		Received By <i>[Signature]</i>		Date/Time 9/29/00							
LABORATORY SECTION		Received By		Title		Date/Time							
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time							

Recra LabNet - Lionville Laboratory
VOA ANALYTICAL DATA PACKAGE FOR
TNUHANFORD B99-093 H1062

DATE RECEIVED: 09/29/00

RFW LOT # :0009L815

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B10F04	001	M1	SO 00LVH438	09/27/00	N/A	10/10/00
B10F04	001 MS	M1	SO 00LVH438	09/27/00	N/A	10/10/00
B10F04	001 MSD	M1	SO 00LVH438	09/27/00	N/A	10/10/00
B10F05	002	M1	SO 00LVH438	09/27/00	N/A	10/10/00
B10F06	003	M1	SO 00LVH437	09/27/00	N/A	10/09/00
B10DY9	004	M1	SO 00LVH438	09/27/00	N/A	10/10/00
B10F00	005	M1	SO 00LVH437	09/27/00	N/A	10/09/00
B10F01	006	M1	SO 00LVH437	09/27/00	N/A	10/09/00
B10F02	007	M1	SO 00LVH441	09/27/00	N/A	10/11/00
B10F03	008	M1	SO 00LVH438	09/27/00	N/A	10/10/00

LAB QC:

VBLKBH	MB1	S	00LVH438	N/A	N/A	10/10/00
VBLKBH	MB1 BS	S	00LVH438	N/A	N/A	10/10/00
VBLKBF	MB1	S	00LVH437	N/A	N/A	10/09/00
VBLKBI	MB1	S	00LVH441	N/A	N/A	10/11/00



**Recra LabNet Philadelphia
Analytical Report**

Client: TNU-HANFORD B99-093
RFW #: 0009L815
SDG/SAF #: H1062/B99-093

W.O. #: 10985-001-001-9999-00
Date Received: 09-29-00

GC/MS VOLATILE

The set of samples consisted of eight (8) solid samples collected on 09-27-00.

The samples and their associated QC samples were analyzed according to criteria set forth in Recra OPs based on SW 846 Method 8260A for client specified Volatile target compound, Carbon Tetrachloride, on 10-09,10,11-00.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analyses:

1. The cooler temperature upon receipt has been recorded on the chain-of-custody.
2. The samples were analyzed within required holding time.
3. The following samples required dilution/medium level analysis because they contained high levels of target compound:

<u>Sample ID</u>	<u>Analysis Level/Dilution Factor</u>
B10F04	medium/50x
B10F05	medium/100x
B10F06	medium/100x
B10DY9	medium/100x
B10F00	medium/500x
B10F01	medium/500x
B10F02	medium/1000x
B10F03	medium/10x

4. All surrogate recoveries were within EPA QC limits.
5. All matrix spike recoveries were within EPA QC limits.
6. All blank spike recoveries were within EPA QC limits.

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 10 pages.

7. "I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature."

by STO WELK
J. Michael Taylor
VP, Laboratory General Manager
Lionville Laboratory

12-11-00
Date

pef\group\data\voa\mu-hanford-09-815.doc



GLOSSARY OF VOA DATA

DATA QUALIFIERS

- U** = Compound was analyzed for but not detected. The associated numerical value is the estimated sample quantitation limit which is included and corrected for dilution and percent moisture.
- J** = Indicates an estimated value. This flag is used under the following circumstances: 1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; or 2) when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. For example, if the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
- B** = This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination. This flag is also used for a TIC as well as for a positively identified TCL compound.
- E** = Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- D** = Identifies all compounds identified in an analysis at a secondary dilution factor.
- I** = Interference.
- NQ** = Result qualitatively confirmed but not able to quantify.
- N** = Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.
- X** = This flag is used for a TIC compound which is quantified relative to a response factor generated from a daily calibration standard (rather than quantified relative to the closest internal standard).
- Y** = Additional qualifiers used as required are explained in the case narrative.



GLOSSARY OF VOA DATA

ABBREVIATIONS

BS	=	Indicates blank spike in which reagent grade water is spiked with the CLP matrix spike solutions and carried through all the steps in the method. Spike recoveries are reported.
BSD	=	Indicates blank spike duplicate.
MS	=	Indicates matrix spike.
MSD	=	Indicates matrix spike duplicate.
DL	=	Suffix added to sample number to indicate that results are from a diluted analysis.
NA	=	Not Applicable.
DF	=	Dilution Factor.
NR	=	Not Required.
SP, Z	=	Indicates Spiked Compound.



Recra LabNet - Lionville Laboratory

Volatiles By GC/MS, Special List

Report Date: 12/06/00 13:54

RPM Batch Number: 0009L815

Client: TNUHANFORD B99-093 H1062 Work Order: 10090001001 Page: 1a

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	Cust ID:	B10F04	B10F04	B10F04	B10F05	B10F06	B10DY9
Sample	RFW#:	001	001 MS	001 MSD	002	003	004
Information	Matrix:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
	D.F.:	111	111	111	200	211	222
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
	Level:	MED	MED	MED	MED	MED	MED
1,2-Dichloroethane-d4		88 %	102 %	106 %	93 %	93 %	90 %
Surrogate Toluene-d8		100 %	97 %	100 %	101 %	101 %	99 %
Recovery Bromofluorobenzene		86 %	87 %	89 %	88 %	84 %	83 %
=====fl=====fl=====fl=====fl=====fl=====fl=====fl=====							
Carbon Tetrachloride		510000	131 %	109 %	1700000	1000000	750000

	Cust ID:	B10F00	B10F01	B10F02	B10F03	VBLKBH	VBLKBH BS
Sample	RFW#:	005	006	007	008	00LVH438-MB1	00LVH438-MB1
Information	Matrix:	SOLID	SOLID	SOLID	SOLID	SOIL	SOIL
	D.F.:	1000	1110	2000	22.9	2.00	2.00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
	Level:	MED	MED	MED	MED	MED	MED
1,2-Dichloroethane-d4		102 %	100 %	89 %	96 %	98 %	102 %
Surrogate Toluene-d8		102 %	100 %	98 %	102 %	80 %	99 %
Recovery Bromofluorobenzene		88 %	85 %	83 %	88 %	78 %	88 %
=====fl=====fl=====fl=====fl=====fl=====fl=====fl=====							
Carbon Tetrachloride		3900000	4000000	9800000	100000	620 U	94 %

*= Outside of EPA CLP QC limits.

RFL Batch Number: 0009L815

Client: TNUHANFORD B99-093 H1062 Work Order: 10985001001 Page: 2a

Page: 2a

202

Cust ID: VBLKBF

VBLKBI

Sample Information

RFW#: 00LVH437-MB1 00LVH441-MB1

Matrix: SOIL SOIL

D.F.:	2.00	2.00
-------	------	------

Units: UG/KG UG/KG

Level: MED MED

	1,2-Dichloroethane-d4	96	%	96	%
Surrogate	Toluene-d8	104	%	100	%
Recovery	Bromofluorobenzene	90	%	86	%

	=====fl=====fl=====fl=====fl=====fl=====fl=====
Carbon Tetrachloride	620 U 620 U

*= Outside of EPA CLP QC limits.

RECRA LabNet Use Only

0009L815

Custody Transfer Record/Lab Work Request

Page 1 of 1

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS



Client: Tnu-Hanford B99-093

Est. Final Proj. Sampling Date: _____

Project #: 10985-001-001-999900

Project Contact/Phone #: _____

RECRA Project Manager: AS

QC Spec: Del Std TAT: 30 day

Date Rec'd: 9-29-00 Date Due: 10-29-00

Account #: _____

Refrigerator #: 1

#/Type Container: 1PG

Volume: 250

Preservatives: -

ANALYSES REQUESTED: ORGANIC

VOA: ✓ BNA: ✓ Pest/PCB: ✓ Herb: ✓

INORG: ✓

MATRIX CODES:	Lab ID	Client ID/Description	Matrix QC Chosen (✓)		Matrix	Date Collected	Time Collected	RECRA LabNet Use Only											
			MS	MSD				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
S - Soil	001	B10F04			So	9-27-00	1236	✓											
SE - Sediment	002	1 5					1245	✓											
SO - Solid	003	1 6					1256	✓											
SL - Sludge	004	B10D49					1111	✓											
W - Water	005	B10F00					1135	✓											
O - Oil	006	1 1					1155	✓											
A - Air	007	1 2					1210	✓											
DS - Drum Solids	008	1 3					1225	✓											
DL - Drum Liquids																			
L - EP/TCLP Leachate																			
WI - Wipe																			
X - Other																			
F - Fish																			

Special Instructions: Saf B99-093

Carbon tetrachloride only

DATE/REVISIONS:

1. Run Matrix QC

2. _____

3. _____

4. _____

5. _____

6. _____

RECRA LabNet Use Only

Samples were:
1) Shipped ✓ or
Hand Delivered ✓

Airbill # _____
2) Ambient or Chilled
3) Received in Good Condition ✓ or N
4) Labels Indicate Properly Preserved ✓ or N

5) Received Within Holding Times ✓ or N

COC Tape was:
1) Present on Outer Package ✓ or N
2) Unbroken on Outer Package ✓ or N
3) Present on Sample ✓ or N
4) Unbroken on Sample ✓ or N
COC Record Present Upon Sample Rec't ✓ or N
Cooler Temp. 4.6 °C

Relinquished by	Received by	Date	Time
<u>AS</u>	<u>D. Smith</u>	<u>9/29/00</u>	<u>0930</u>

Relinquished by	Received by	Date	Time
<u>COMPOSITE</u>	<u>ORIGINAL</u>		

Discrepancies Between Samples Labels and COC Record? Y or N ✓

NOTES:

4235 7952 9415

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B99-093-17		Page 2 of 2		
Collector TMJOHANSEN/GSTHOMAS		Company Contact VIROHAY		Telephone No. 372-9100		Project Coordinator TRENT, SI		Price Code 9N		
Project Designation 200-ZP-2 Passive Soil Vapor Extraction - Other Solid		Sampling Location 200W		SAF No. B99-093		Air Quality <input type="checkbox"/>		Data Turnaround 45 Days		
Ice Chest No. ERC 99-052 (10FI)		Field Logbook No. EL-1516		COA R20ZP2DP60		Method of Shipment FED EX				
Shipped To TMA/RECRA 9-27-00		Offsite Property No. A000344				Bill of Lading/Air Bill No. 42357953-9415				
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation	Cool 4C						
			Type of Container	aG						
			No. of Container(s)	1						
			Volume	250mL						
Special Handling and/or Storage Sample originated in non radiological zone <2000pci/g										
SAMPLE ANALYSIS			VOA - 8260A (TCL) (Carbon tetrachloride)							
Sample No.	Matrix *	Sample Date	Sample Time							
B10F04	OTHER SOLID	9-27-00	1236	X						
B10F05	OTHER SOLID	9-27-00	1245	X						
B10F06	OTHER SOLID	9-27-00	1250	X						
CHAIN OF POSSESSION				Sign/Print Names				SPECIAL INSTRUCTIONS		
Relinquished By		Date/Time		Received By		Date/Time		<p>** Laboratory may use medium level preparation for VOA. They are to report any other halogenated compounds found.</p> <p>** Laboratory must include the % Moisture data as part of all hard copy reports.</p> <p>Samples stored in Ref. # 28 at the 3728 Shipping Facility on 9/27/00</p> <p>Collector not available to relinquish samples on 9/28/00 for shipment.</p> <p style="text-align: right;">RT 9/28/00</p>		
Relinquished By		Date/Time		Received By		Date/Time				
Relinquished By		Date/Time		Received By		Date/Time				
Relinquished By		Date/Time		Received By		Date/Time				
Relinquished By		Date/Time		Received By		Date/Time				
Relinquished By		Date/Time		Received By		Date/Time				
LABORATORY SECTION		Received By		Title				Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By				Date/Time		

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						B99-093-17		Page 1 of 2	
Collector TMJOHANSEN/GSTHOMAS		Company Contact VJROHAY		Telephone No. 372-9100		Project Coordinator TRENT, SJ		Price Code 9N		Data Turnaround 45 Days	
Project Designation 200-ZP-2 Passive Soil Vapor Extraction - Other Solid		Sampling Location 200W		SAF No. B99-093		Air Quality <input type="checkbox"/>					
Ice Chest No. <u>E.RC'99-052 (102)</u>		Field Logbook No. EL-1516		COA R20ZP2DP60		Method of Shipment FED EX					
Shipped To .TMA/RECRA TMS 9-27-00		Offsite Property No. <u>A000344</u>		Bill of Lading/Air Bill No. <u>42357953-9415</u>							
Special Handling and/or Storage Sample originated in non radiological zone <2000pci/g		Preservation		Cool 4C							
		Type of Container		aG							
		No. of Container(s)		1							
		Volume		250mL							
SAMPLE ANALYSIS		VOA - E260A (TCL) (Carbon tetrachloride)									
Sample No.		Matrix *		Sample Date		Sample Time					
B10DY9		OTHER SOLID		9-27-00		1111		X			
B10F00		OTHER SOLID		9-27-00		1135		V			
B10F01		OTHER SOLID		9-27-00		1155		X			
B10F02		OTHER SOLID		9-27-00		1210		X			
B10F03		OTHER SOLID		9-27-00		1225		X			
CHAIN OF POSSESSION						SPECIAL INSTRUCTIONS					
Relinquished By <u>T.M. Johnson</u>		Date/Time <u>9-27-00</u>		Received By <u>R. Thorey</u>		Date/Time <u>9-28-00</u>		SPECIAL INSTRUCTIONS ** Laboratory may use medium level preparation for VOA. They are to report any other halogenated compounds found. ** Laboratory must include the % Moisture data as part of all hard copy reports. Samples stored in Ref.# 2B at the 3728 Shipping Facility on 9/28/00 Collector not available to relinquish samples on 9/28/00 or shipment. <u>RT</u> <u>9/28/00</u>			
Relinquished By <u>R. Thorey</u>		Date/Time <u>9/28/00</u>		Received By <u>F. Deek</u>		Date/Time <u>9/28/00</u>					
Relinquished By <u>M. O'Connor</u>		Date/Time <u>9-29-00/0930</u>		Received By <u>D. J. ...</u>		Date/Time <u>9-29-00/0930</u>					
Relinquished By		Date/Time		Received By		Date/Time					
Relinquished By		Date/Time		Received By		Date/Time					
LABORATORY SECTION		Received By		Title		Date/Time					
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time					